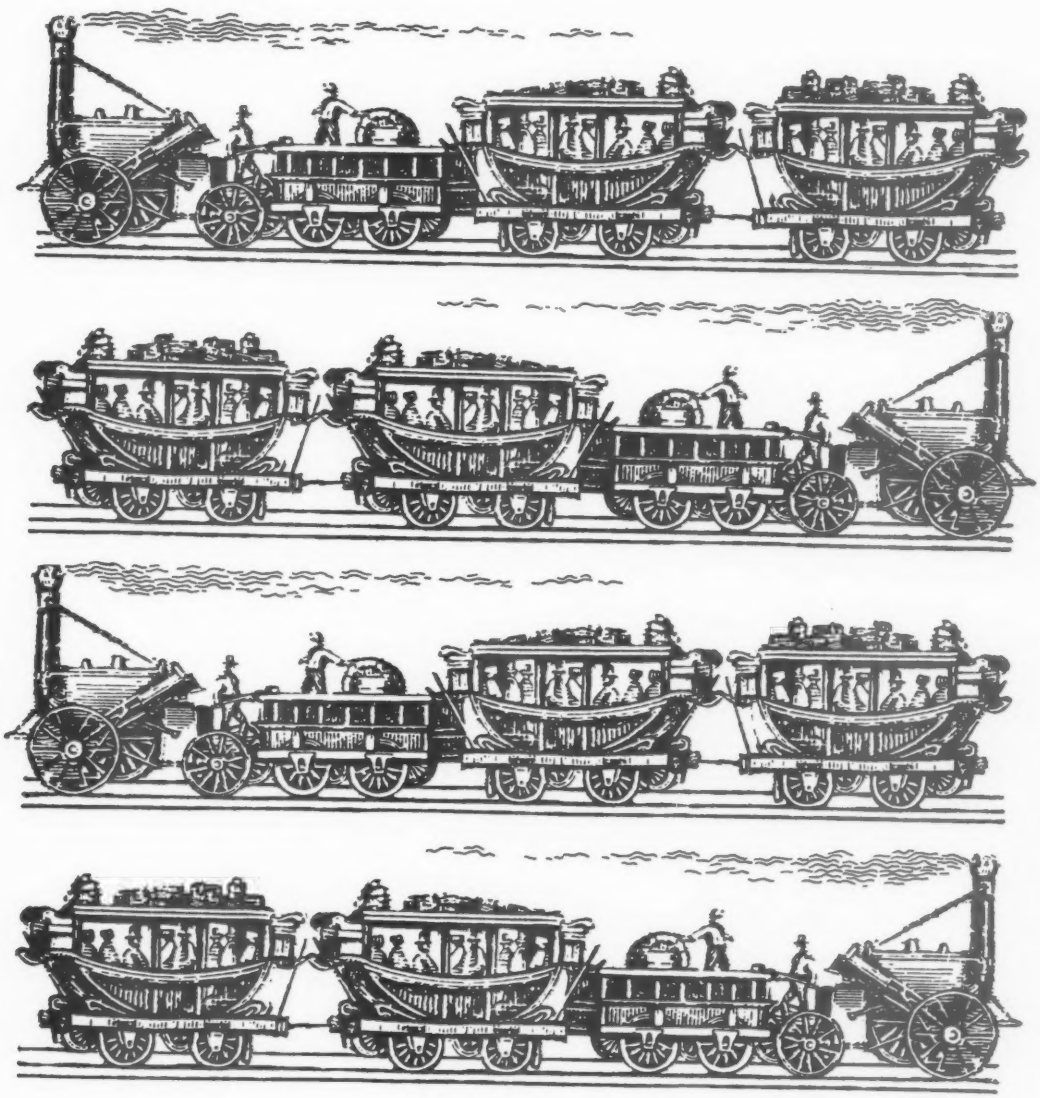
THE

Johns Hopkins

MAGAZINE

January 1953



THE WONDERFUL SCIENCE OF TOYS ~PAGE 22

Sgt. 1st Class Einar H. Ingman U. S. Army Medal of Honor

"The sergeant charged alone . . ."

THE REDS IN AMBUSH on the ridge had lain concealed, withholding their fire. Now they opened up. The two squads were trapped. Their leaders were wounded; others were dropping.

Sgt. Ingman took command. He reorganized the survivors, assigned fields of fire, encouraged the men to fight. A red machine gun opened fire. The sergeant charged it alone, neutralizing it with a grenade.

Then he tackled another gun. A grenade and a burst of fire knocked him down, badly wounded. He got up, reached the gun, and dispatched the entire crew. When his squad reached him, they found Sergeant Ingman unconscious—but 100 of the enemy fleeing in panic.

"Bucking the Communists," says Sergeant Ingman, "takes an awful lot of staying power. The G.I.'s have got it. You have, too, when you invest part of your hard-earned pay *regularly* in Bonds."

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THE Johns Hopkins MAGAZINE

VOLUME IV January, 1953 NUMBER 4

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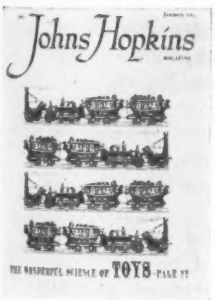

THE COVER

The little train chugging back and forth on this month's holiday cover—and, we hope, putting you in the right mood to look at our holiday story on "Scientific Toys" (page 22)—comes from a fine collection of B. & O. Railroad lore in the John Work Garrett Library at Johns Hopkins. It really ran, back in the pioneering 1800's.

ADAPTED BY HERMAN SUTER

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Several decades ago the great Hopkins physicist, Robert W. Wood, in a half-playful mood developed a picture-taking technique to show "how the world looks to a fish." Here is a 1953 sequel.

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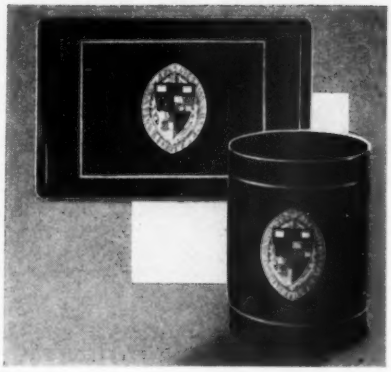

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EDITORS' NOTES

We can't remember when we have had so much fun preparing an article for *The Johns Hopkins Magazine* as we had with the "Toys" story which begins on page 22 of this issue. To gather material for it—namely, lots of toys based on scientific principles—we spent a joyful day going through the stock of two Christmas-crammed New York toy stores, and who can imagine a more wonderful assignment than that?

Naturally we could leave nothing to chance and had to test all the toys thoroughly before accepting them for publication. This meant standing for a half-hour watching an inch-tall man load milk-cans on a toy refrigerator car (a "reefer," we had learned to call this car by the time we were through); launching the toy helicopter which appears on page 26 (we noted that others had been testing this item before us: the ceiling above the counter where the helicopters were displayed was badly chipped and scarred); and perfecting our Yo-Yo technique (which had grown somewhat rusty since the days when we were Yo-Yo champion of the sixth grade). It is fortunate that the salespeople in toy stores are tolerant folk, for looking back upon it now, we suspect we may have made something of a nuisance of ourselves.

If *we* had fun, however, it was nothing compared to that which a number of members of the Johns Hopkins faculty seemed to have with the toy story, too. On any day recently, you could have found our office occupied by at least one professor deeply engrossed in studies of the playthings which we had assembled for the article.

The most fascinating toy, all of our visitors seemed to find, was the "turnover top" which appears on page 27. This gadget is indeed a baffling thing, as the pictures in our article show, and the theories advanced to explain its strange behavior ranged wildly (we received them from doctors of philosophy, doctors of medicine, doctors of engineering, and just about everybody else who dropped by). Nearly everyone concluded that the top must

have some mysterious mechanism hidden inside—an explanation which we were usually able to spike by pointing out that the top costs only a dime, and you can't build much of a mechanism, especially in these days, for a price like that. For those who continued to be doubtful, we kept a dismantled top on hand, into whose interior we invited the skeptics to peer. Their report, delivered sheepishly, was always the same:

It's empty.

We know that many readers will share the glad feeling we received from a letter written in response to the article, "Moist Air To Breathe," which appeared in our November issue. "Moist Air To Breathe," you may remember, told of the use of a new oxygen-tent apparatus in the Texas polio epidemic, and among the patients pictured was a child named Patty Sue Pedigo.

"I am," said the letter, "naturally interested in the article. The little girl shown, Patty Sue, is my daughter. . .

"I am sure that you will be glad to hear that Patty is coming along nicely now, and although she is still in the respirator most of the time, she is gradually working out. We have a right to the best of hopes that she will eventually make a full recovery. . ."

If there is any part of this issue to which we think our readers will wish to return again and again, it is that which begins on page 19. There we present drawings made at the Johns Hopkins Hospital by Aaron Sopher, and no one who is familiar with Mr. Sopher's work needs to be told why we feel that perusal and re-perusal of his drawings is sure to be worthwhile.

One who is better qualified than we to analyze such things once put it this way:

"In a world in which so many artists are elbowing their way to the front, panting for opportunities to exhibit their paintings, here is an artist who is satisfied to make his personal expression in the most modest of terms.

"Some of his drawings, modestly brought to public view, may rest securely in the galleries of our better museums when paintings that now flame across the land are gathering dust in mysterious vaults."

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TOYS ON TELEVISION

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Educational Theater

Under leadership of Mrs. Frances C. Bowen (at right of stage, *below*), members of the Children's Educational Theater at Johns Hopkins exercise their imaginations in acting out stories from children's folklore.

Photographs for The Johns Hopkins Magazine by Werner Wolff, Black Star

THE children skipping across the stage in the picture above, and those acting in the scene on the opposite page, are thoroughly enjoying themselves. Most of them do not realize it (if they did, it probably wouldn't seem enjoyable any longer), but they are being seriously educated as well.

They are members of the Children's Educational Theater at Johns Hopkins. The Children's Educational Theater does not exist to develop stage-struck youngsters for careers on Broadway or in Hollywood. It does not even exist, primarily, for the purpose of turning out dramatic productions to be presented before audiences of admiring parents and envious friends. Its aim is to educate, and (because many people seem to misunderstand that fact) those connected with the group sometimes wish that the word "Educational" could be heavily underscored in the Theater's name.

Wonderful things tend to happen to children who are lucky enough to be admitted to the Theater group (their number must be limited, and many applicants must be turned away). Shy children shed their reticence; overly exuberant children learn to be cooperative and find a wholesome outlet for their energies; the "average child" becomes more creative. And all have fun.

Many times recently, Photographer Werner Wolff sat in. For his report in pictures, turn the page.

CHILDREN'S THEATER

Continued

Director Frances C. Bowen outlines story for class.

Under careful guidance, young imaginations stir

Once she has planted idea, Mrs. Bowen lets pupils tell the story. Then (*below and opposite*) they act out its parts.

In this scene, children in foreground are seedling flowers. "Sun" stands shining behind them, "rain" waits offstage.

But sun (*right, rear*) grows tired and sets.

Beneath the warm sun, flowers grow tall.

Among the friendly signs in the forest are big, round, orange pumpkins.

And there are friendly animals, too. . .

Here are Snow White and her woodsy friends

Poor Snow White is lost in the big forest. She was left there by bad hunters and is very forlorn. But soon she finds that she has many friends in the forest. Some of them can be seen in the pictures around her.

. . . such as cuddly squirrels, smiling from tree-stumps. . .

. . . .and gentle rabbits anxious to be friends.

Many children are shy when they first come to the Theater. Like little Jimmy. He was sure he didn't like it there.

Jimmy at first was shy

Jimmy felt better when Mrs. B. let him stand beside her.

But when his turn came to go up on the stage, Jimmy was uncertain again. He stood shyly apart from other kids.

And he stayed on the fringes as
the others planned their parts.

For a while he watched wistfully
as others began a gay dance.

Then, tentatively, he joined in.
Soon he wore a little smile.

And finally his
smile spread
into a broad
and lasting grin.

Mrs. Bowen and pupils discuss a story before acting it out.

"We knew it would not be all play"

THE children who come to the Educational Theater at Johns Hopkins think that Mrs. Bowen, the director, must have more fun than anybody. She can make nicer raindrops, just by wiggling her fingers in a certain way, than anyone else they know. She can be all sorts of things when she chooses: animals, and flowers, and birds, and even, sometimes, a princess or a prince.

The surprising thing to grown-ups is that Mrs. Bowen actually *does* seem to have the most fun of all, despite the Theater's strenuous routine. This is undoubtedly because she is devoted to her work and convinced that helping children develop their personalities is an undertaking which is excitingly worthwhile.

Nevertheless, directing the Children's Theater is a demanding job. "We knew it would not be all play when we started," Mrs. Bowen once said, and indeed it has not been. Simply adhering to the central purpose of the Theater—to educate—has in itself meant resisting strong pressures and, sometimes, temptations. "Most people think that the Children's Theater is a dramatic school where children are prepared for a professional theatrical career," Mrs. Bowen says. "Others believe that the play is the important thing and that only specially gifted children are eligible for membership. Neither of these beliefs is true."

Among the younger children, whose activities are pictured on these pages, Mrs. Bowen uses a teaching technique known as "creative dramatics." She and the children choose a story (usually a favorite myth or folk-tale) and talk about it in detail. The children decide what characters they will need in order to present each episode on the stage: a farmer, perhaps, and his wife; three nice, round pumpkins; the sun and some rain to make the pumpkins grow. Then some of the children act out the episode, making up their own gestures and dialogue as they go along. The rest of the class watches, offering helpful suggestions, and then another group climbs to the stage to present the same scene—with improvements. It is a rare child whose imaginativeness and cooperativeness fail to respond.

Besides helping the children themselves, the Educational Theater welcomes teachers from elementary and secondary schools who wish to use such techniques in their own classrooms. "But in the end," says Mrs. Bowen, "our theater centers around the children. It is a place where favorite story-book characters come alive to color their lives with magic, mystery, romance."

Every child has a chance to interpret characters. Little Jimmy (*pages 8–9*) after four weeks is one of eagerest boys in class. ▸

Four goggly views by glass-eyed 'fish'

Piscatorial Eye-View

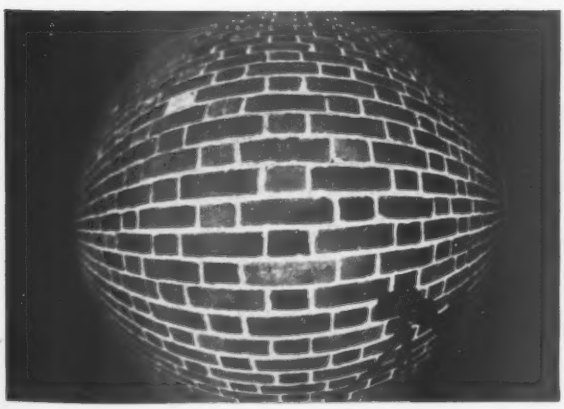
A playful physicist shows how things may look to a fish

CAMERAS are fascinating things even when used "straight," simply to record the people and objects which one sees 'round about. Few persons, however, once they have a camera in their hands, are content to use it only to make facsimiles of the human eye's view of things. The urge to experiment is great.

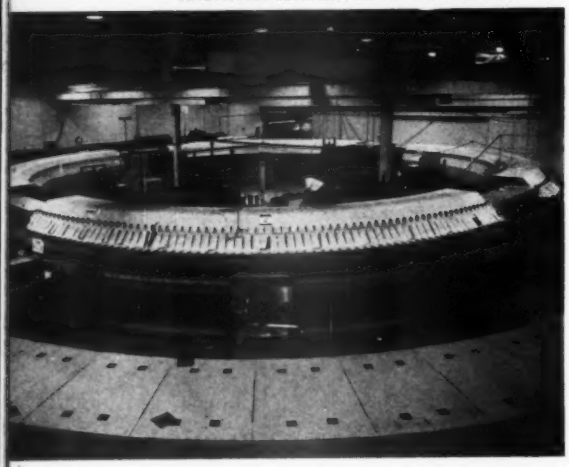
One inventive prankster with a camera—as well as a serious experimenter—was Dr. Robert W. Wood, now research professor of physics at Johns Hopkins. Several decades ago Dr. Wood decided to show the world how things look to a fish. He built a camera with its lens immersed in water and proceeded to take pictures. The distorted images, he solemnly announced, were the way fish see what they peer at.

This winter, also motivated by nothing more serious than a lively curiosity, William M. Sinton, another member of the Hopkins physics department, attached a "fish-eye" to a camera. Instead of being immersed in water, it is an odd glass contraption which fits neatly into a standard Leica. The lens is a thick, stepped-back piece of plate glass, backed by a hemisphere, and slightly raised from the front of the camera so that it will cover a full 180 degrees.

Here are the results of Mr. Sinton's labors. He—joined by *The Johns Hopkins Magazine*—presents them with no sweeping claims. No revolutions coming in photography. Not even a practical application in sight. Just the way things *might* look to a fish.



PHOTOGRAPHS FROM BROOKHAVEN NATIONAL LABORATORY



This is the mighty Cosmotron at Brookhaven National Laboratory, dedicated December 15. Here, the nuclear event at the right occurred.

THE TURNING POINT

Brookhaven's great Cosmotron is ready to duplicate cosmic rays in the lab

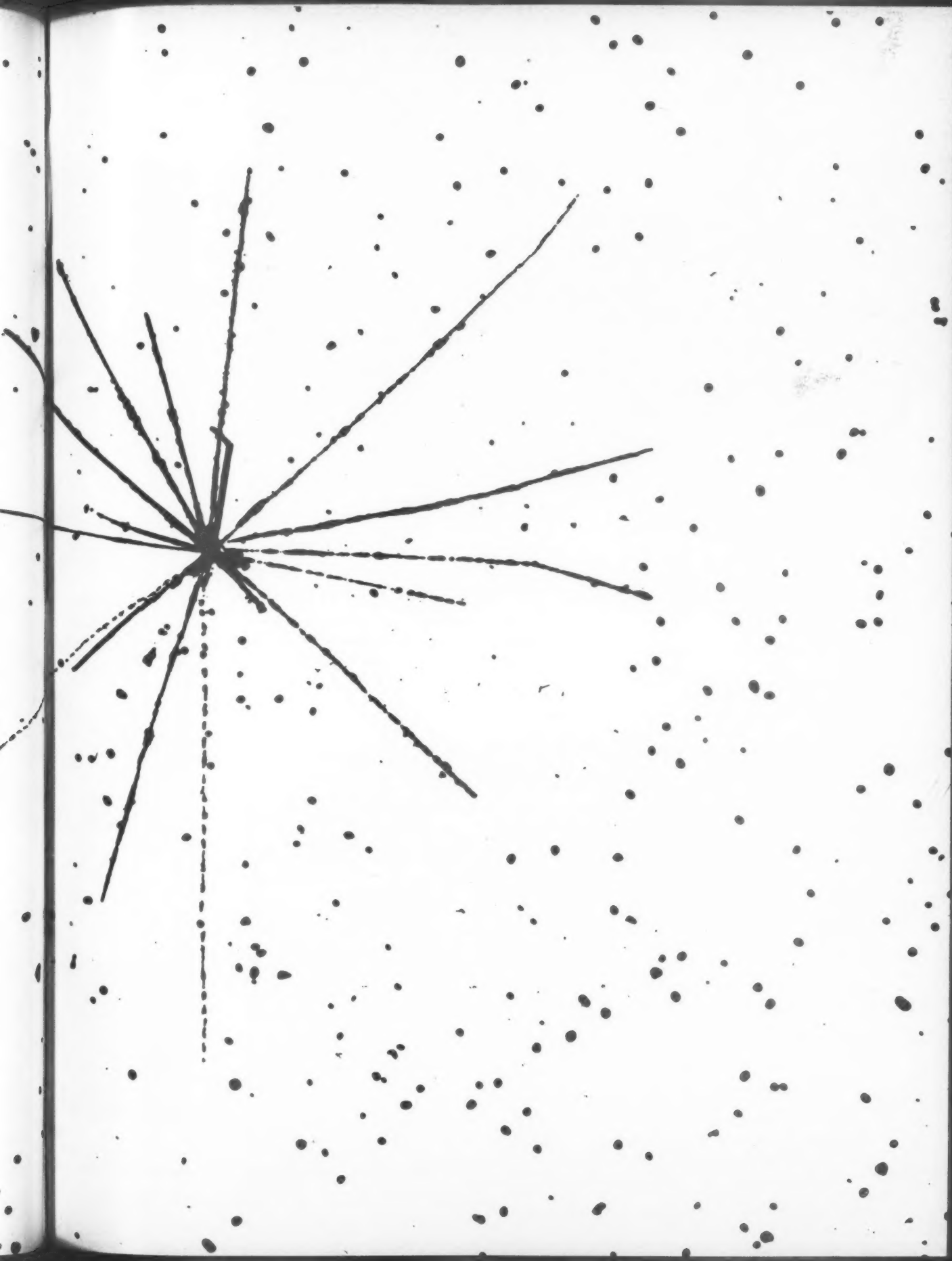
THE star-like picture on the opposite page is neither a drawing nor, in the conventional sense, a photograph. It is the self-portrait of the exploding nucleus of an atom. Although exploding nuclei have made pictures of themselves before, this particular portrait is a milestone—one of the most significant along the road of nuclear research.

Until it was made, the type of nuclear "event" which it pictures had occurred only through the action of cosmic rays. As they bombard the earth's atmosphere, cosmic rays produce the highest energies which atoms have been known to release. (Energies associated with cosmic rays are measured in billions of volts. A typical nuclear reaction releases about ten *million* volts, puny by comparison.)

The event pictured here, however, did not occur in the outer reaches of the atmosphere, nor was it the work of cosmic rays. It occurred in the emulsion of a piece of photographic film in a laboratory. And the two-billion-volt particle which produced it had been given such energy—for the first time in history—by man.

On December 15, the Cosmotron, the mighty machine which had accelerated the particle to its great energy, was officially dedicated at Brookhaven National Laboratory on Long Island, N. Y. Gordon Dean, chairman, and Dr. Henry D. Smyth were scheduled to speak for the Atomic Energy Commission; President Detlev W. Bronk, of Johns Hopkins, for the nine universities which jointly operate Brookhaven under contract with the AEC. The ceremonies formally marked a turning point in research: the point at which some of man's most advanced studies of the nucleus of the atom could henceforth be conducted under laboratory control.

The first two-billion-volt event was indeed a milestone. But beginning in 1953, the Cosmotron's delivery of two-to-three-billion-volt energies should be routine. (*See page 16*)



High in the Rockies, at Berthoud Pass, Colorado, Brookhaven scientists conducted certain cosmic-ray studies. Geiger counters in trailer were triggered by nuclear particles from cosmic rays.

From cosmic rays to Cosmotron

To study many aspects of the forces which exist between nuclear particles, scientists heretofore have been forced to work with cosmic rays themselves, wherever they could find them. For only the cosmic rays possessed the billion-electron-volt energies which cause some of nature's most meaningful nuclear "events."

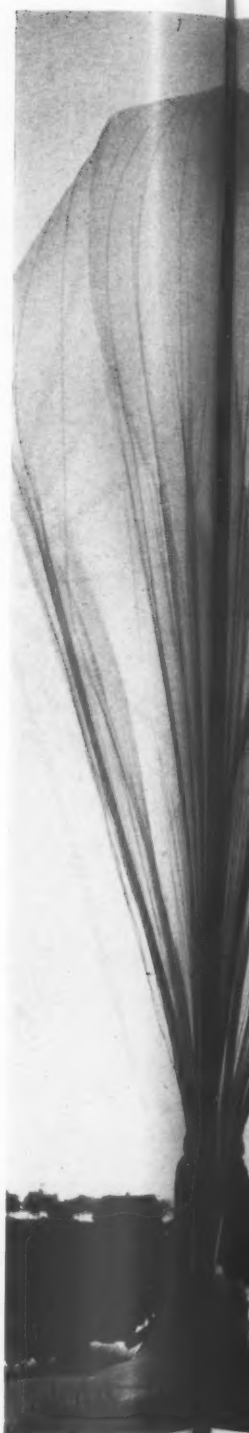
This posed difficulties, since the events occur far above the earth's surface, before the atmosphere has had a chance to absorb the cosmic rays. At altitudes in excess of twenty miles, in a constant downpour of nuclear debris, protons and other particles smash into nuclei, releasing mesons and other particles.

One way to observe such events at high altitudes is to send special photographic films into the upper atmosphere via balloons (*see photograph at right*). Charged particles leave a trail as they dart through the emulsion of the films, and often, from the length and other characteristics of this trail, physicists can deduce the particles' identity and energy.

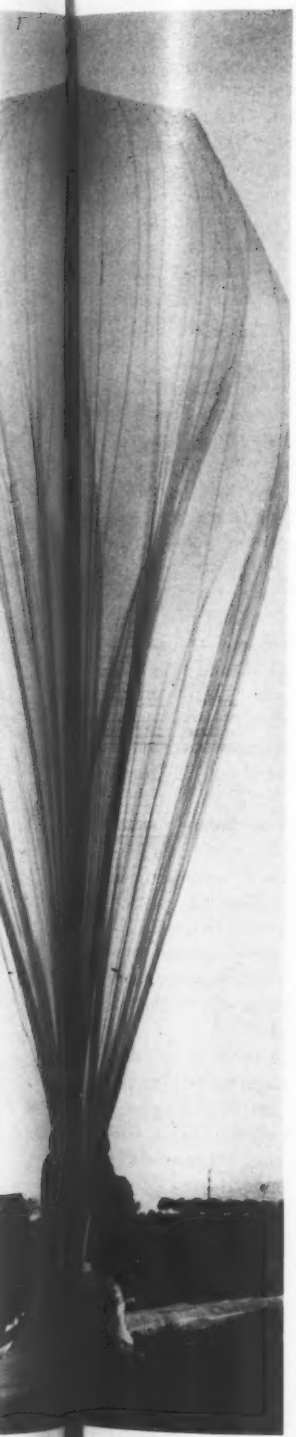
Sometimes, when the cosmic "bullet" hits the nucleus of an atom in the emulsion, other particles are broken loose. They shoot out like the points of a star (in the exploding nucleus on the preceding page, seventeen different particles can be seen). Analysis of such patterns often reveals information about the makeup and nature of the nucleus.

A nucleus, however, is a tiny target in space for a still tinier bullet to hit. Therefore bull's-eyes are fairly infrequent. Besides, except for an occasional "rare event" which cannot be explained in terms of known particles, or except for the degeneration of some particles into others in "decay schemes" new to existing theory, most hits have already been classified. Collection of additional data and further study are now the need.

As high-energy, or "primary," cosmic rays descend toward the earth, they chip particles off the atoms of air they encounter. Some of these



Balloons have been sent [illegible] loft, to [illegible] rays are more plentiful [illegible] level, by



PHOTOGRAPH BROOKHAVEN NATIONAL LABORATORY

...een sent ... plentiful ... loft, to height where cosmic ...vel, by Brookhaven crews.

"secondaries," such as heavy mesons, themselves disintegrate into light mesons and other particles. Others chip additional particles off air atoms. Scientists are anxious to understand this chain of events in some detail, as a means of charting the family tree of nuclei and their descendants, the particles.

One way to spy experimentally on the life cycle of cosmic rays is to place an observation station in the mountains, where high-energy particles of the kind which interact strongly with nuclei are still plentiful (only a few are able to penetrate the atmosphere to sea level). In a large trailer at Berthoud Pass, Colorado, high in the Rockies, Brookhaven scientists triggered Geiger counters to respond to certain particles, and electronic equipment automatically recorded the events which these particles caused (*see picture at far left*).

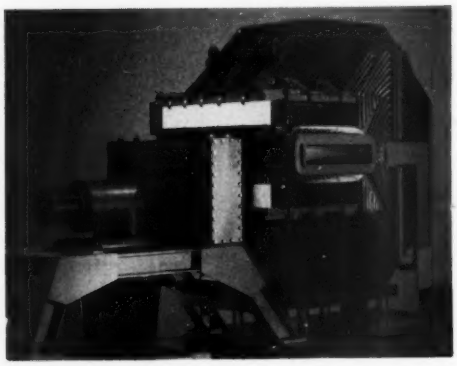
Now comes the Cosmotron, pointing the way to the staging of nuclear events in the laboratory. It will not suddenly and completely replace other means of studying nuclear behavior; photographic films, for example, will probably still be sent to the outer atmosphere, via balloons and rockets, to study cosmic-ray energies of the order of 100 billion volts. But machines to produce particles of even that staggering energy are now in the talking stage, and eventually all nuclear studies of high-energy particles may be brought under the control of precise laboratory conditions.

The very size of the Cosmotron is an impressive thing. But it is also a drawback. In September, four Brookhaven physicists announced a theory which may make it possible to build a high-energy accelerator less massive than the Brookhaven Cosmotron yet capable of producing atomic particles with energies more than ten times as great as those delivered by the Cosmotron.

Projecting their theory to possible future design, the physicists believe that a thirty-billion-volt machine would require a magnet of half the weight of the Cosmotron's 2,200-tonner, which is designed to produce "only" three-

But now the Brookhaven Cosmotron is in use; since it produces high-energy particles under controlled laboratory conditions, a large portion of such research as at left is concentrated there.

Massive Cosmotron equipment: left, Van de Graaf generator for injecting protons; below, model of Cosmotron cross-section, ignitrons, and generator.



billion-volt particles. While the Cosmotron's magnet units measure eight by eight feet, the future machine's would have dimensions of only one and a half by two feet. (The thirty-billion-volt machine would, however, have ten times the orbit-diameter of the Cosmotron, and its radio-frequency system of building up the energy of particles would be more complex.)

Although plans have not yet been made for actually building such machines, the theory and its possible application to a hypothetical thirty-billion-volt accelerator may help hasten its becoming a reality.

THUS, as the Cosmotron is dedicated, marking a long step forward in the instrumentation of nuclear research, scientists are planning for even more far-reaching attacks upon the mysteries of the building-blocks of matter. Such has been the restless searching for knowledge which has characterized Brookhaven since its founding shortly after World War II—and which, indeed, motivated its establishment in the first place. Its primary objective is basic research: to conduct long-term, fundamental studies in nuclear and related sciences. From such research can be expected to emerge developments of vast usefulness; but the basic objective now is to add to man's reservoir of knowledge about the atomic nucleus.

The Cosmotron, and the other complex equipment required in such studies, could not have been built by a single private institution; far vaster resources were needed than any one organization possessed. Brookhaven National Laboratory, then, is a new organizational phenomenon on the American research scene, born of the necessity for joint action and of the impossibility of any other kind.

Managing Brookhaven is a corporation called Associated Universities, governed by two trustees —one a scientist, the other an administrator— from each of nine universities: Columbia, Cornell, Harvard, Johns Hopkins, Massachusetts Institute of Technology, Pennsylvania, Princeton, Rochester, and Yale. Associated Universities, Inc., carries on the work at Brookhaven under contract with the U. S. Atomic Energy Commission.

"In its relationships with a government agency, a group of universities, and the scientific community at large," a Brookhaven scientist once said, "the Laboratory is in itself a new experiment in collaboration."

At the Cosmotron dedication, as horizons were broadened for Brookhaven's research, there were indications anew that the experiment works.

HOSPITAL CLINIC

DRAWN BY AARON SOPHER

Hospital Clinic
CONTINUED

310
CLINICAL
LABORATORY
ROOM 308
PLEASE
Q. Sopher
Q.S
Q.S

THE WONDERFUL SCIENCE OF

Toys

Photographs for The Johns Hopkins Magazine by Werner Wolff, Black Star

Toys are things one finds under one's Christmas tree, if one has been a good little girl or boy, or in wonderland areas of department stores, now digging out from an annual flood of children and parents (mostly parents). Toys are also the beneficiaries of complex scientific research. They embody principles discovered by Archimedes and Newton, and by hosts of lesser lights of the science world. Most people never think about the serious basis of toys (and why should they?), nor does *The Johns Hopkins Magazine,* in this festive season, intend to grow grave and do so. On the following pages, we—and others at Hopkins—play. Won't you join in, too?

The Dipping Bird: why does he drink? See next page

SCIENCE OF TOYS

Continued

The Busy Loco

This is a *very* busy locomotive, as you can see. She is a very economical locomotive as well: all she needs is air. Blow up the balloon on her smokestack, put her on the floor, and with a merry toot, away she goes.

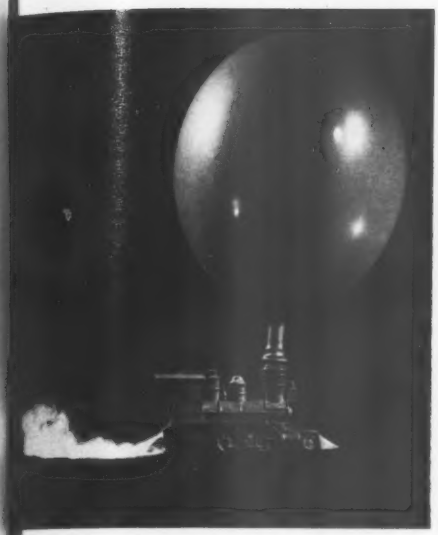
Want to see how she works? Ask Dad to take a deep puff on his pipe, then fill the balloon with smoke. When the loco runs, the smoke will show you how the deflating balloon shoots air out of a little hole at the back and shoves the engine along. Every action, a man named Newton once told us, has an equal and opposite reaction—which is the secret of it all. Back shoots the air, forward shoots the locomotive. All aboard!

◀ *On this railroad it's not the engine that puffs, but the engineer. He must blow up the balloon.*

. . . And here is how Dippy takes his drinks

Here is the thirstiest bird ever. Perhaps he has been eating salted peanuts or something. He surely loves to drink.

You start Dippy bobbing by wetting his beak with water. As the water evaporates, it cools his head. This causes a vapor in his head, called methyl chloride, to condense into a liquid, which unbalances Dippy and tips him over into the water. While he's bending over, more vapor rushes into his head, some of the liquid runs down into his body, he becomes heavier in his tail, and up he pops. Won't this funny, thirsty Dippy ever get his fill?



The boy didn't fill the balloon with smoke; his dad did to see how it works.

The balloon squeezes out the air in a powerful stream—and away she goes! ➤

The Weary Putty

Did you ever get so tired that you thought you just couldn't hold your face in place any longer? Well, that's the way the little fellow at the right must feel, judging from his looks.

Of course, one reason he is so sad is that everybody calls him Silly. "Silly Putty" is his name, and he probably thinks that when people call him that, they are being mean. Which hurts poor Silly's feelings, because he really cannot help himself.

Actually, "Silly" is short for "silicone," which is what makes him act as he does. He's a polymeric organic silicon compound. Someone ought to tell Silly that. *Then* he should be happy, eh?

The Versatile Spinners

The Yo-Yo at the left, the helicopter at the right, the gyroscope below, and the top on the opposite page are all spinners. (The balancing clown will spin, too, but he doesn't balance *because* he spins.)

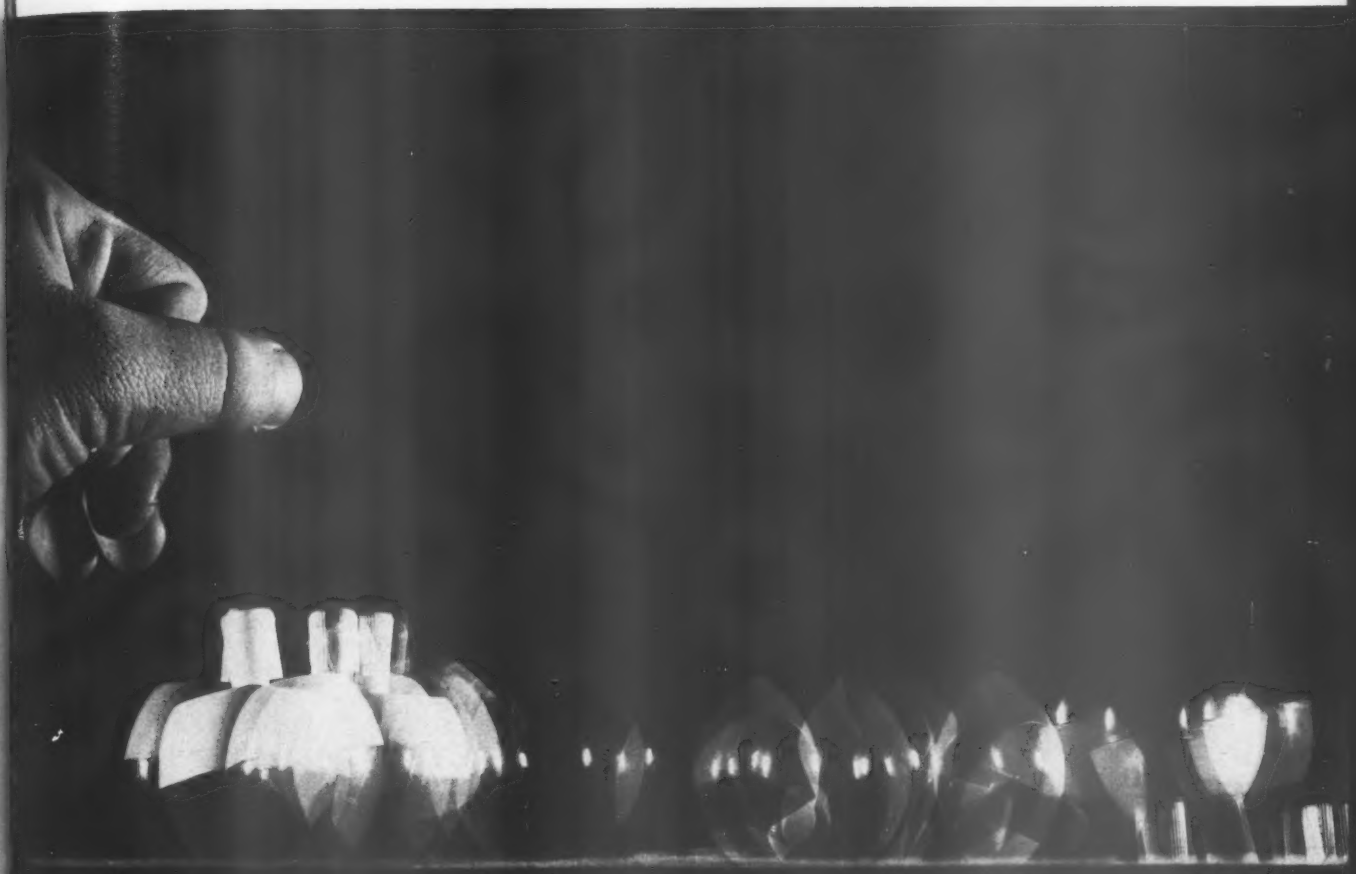
The helicopter's whirring blades push the air beneath them downward, which is how the helicopter manages to stay up. The Yo-Yo whizzes down one side of its string and climbs back up the other into your hand. Aren't spinners versatile?

The Turvy Top

The top at the right is a queer performer, indeed. Standing still, it rests upon its round bottom. But when you rotate it rapidly, it does a complete topsy-turvy. It climbs up on its stem. Some spinners, like the gyroscope (*below*), insist on continuing in the same direction they start in. But the topsy-turvy top isn't satisfied to live in such a rut. So, defiantly, over it turns.

The Steady Gyro

Besides being a mystifying toy, the gyroscope is a useful thing. Its spinning wheel likes to keep going in the same direction all the time, and puts up a great fight if you try to change it. It is used to keep planes and ships from rolling and as a non-magnetic compass. Constant angular momentum, its behavior is called. You can always count on a gyro.



The Balancing Clown

If you have ever tried to stand on your nose, you know how difficult it is. So think how amazing it is for this clown to balance himself so nasally!

He is like a pair of scales. Scales have a knife-edge in the middle, from which extends a beam. From the beam hang two pans on which you can weigh things. The pans may move up or down under different weights, but the beam stays balanced on its knife-edge.

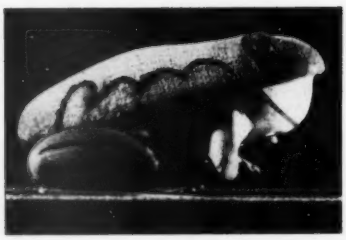
The clown can do fine tricks, but he is unhappy. How would *you* like to have a knife-edge for a nose?

SCIENCE OF TOYS

Continued

Slinky, the Stairwalking Spring

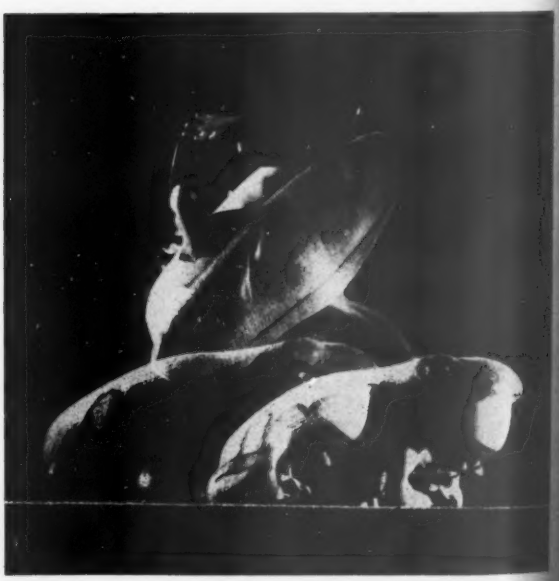
Slinky likes nothing better than to walk down a long flight of stairs. Second best is to be jiggled back and forth from hand to hand (*above*), but this often results in little boys' getting their hands and noses pinched (*opposite*). Slinky is a spring, and like all springs, when stretched, he does everything possible to return to his original shape. But when he does this on a staircase, he flops over so eagerly that he can't stop himself. So down the stairs he goes, head over heels. That's fine for Slinky—but please, please, don't *you* try.



Hector, the Leaping Frog

A man named Mark Twain once wrote a funny story called "The Celebrated Jumping Frog from Calaveras County." Our Hector isn't celebrated, and he will perform in *any* county, just so you give him a happy home. He has a little lever which thrusts down upon the floor and (Mr. Newton again) causes him to turn a beautiful somersault. Hooray, Hector!

CLASS DISMISSED



NEWS at Johns Hopkins

For the first time in the history of the University, Johns Hopkins graduates are voting this month for members of the University Board of Trustees. They are nominating, from a slate of eight candidates, four of their fellow alumni to serve on the Board.

While a significant proportion of the present Board is composed of Hopkins graduates, their alumni status was not a prerequisite to their being elected, nor did alumni have a direct voice in their selection. Now, with nominations being made by a committee designated by the Alumni Association and a direct mail vote being taken among all who have held degrees from the University for five years or more, direct nomination by alumni will be in effect.

The balloting is the result of a revision of the by-laws of the Board which provides:

"The Board of Trustees may, by resolution, increase its number to thirty-four members by the election as Trustees of persons nominated in a manner satisfactory to it.

"Each of these additional four members shall be a person who has been granted one or more academic degrees by the University at least five years prior to the date of his nomination and is not a member of the faculty or administrative staff of the University.

"Trustees so nominated and elected shall serve for a term of four years except those first elected, who shall serve for terms of one, two, three, and four years respectively. Trustees so nominated and elected may not serve as such for more than one full term of four years, nor shall they be eligible for election otherwise to the Board of Trustees for a period of at least one year following such service."

The Alumni Association's executive committee resolved that the nominating committee should place "at least eight candidates in nomination" on a ballot to be circulated among alumni eligible to vote. Thus, in the first year of the nomination plan, alumni would select four persons as their nominees from a list of at least eight names selected by the Alumni Association committee.

Those on the ballot are:

John R. Bartels, B.A. '20, attorney, New York City.

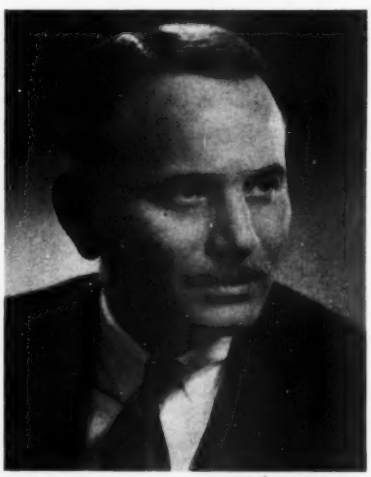
Worth B. Daniels, M.D. '24, physician, Washington.

Allan C. Davis, B.A. '17, business executive, Baltimore.

Hugh L. Dryden, B.A. '16, M.A. '18, Ph.D. '19, director, National Advisory Committee for Aeronautics, Washington.

D. Mead Johnson, B.S. in Econ. '36, business executive, Evansville, Ind.

Ogle Marbury, B. A. '02, retired chief judge, Maryland Court of Appeals.



LASDON FOUNDATION

Robert H. Broh-Kahn

Dr. Broh-Kahn, g. '33-'36 (Physiol. Chem.), is the new scientific director of the Lasdon Foundation, a philanthropic organization designed to further scientific research in the field of medicine. Dr. Broh-Kahn will coordinate research activities supported by Foundation grants.

Walter B. Martin, M.D. '16, physician, Norfolk, Va.

Dorsey Richardson, B.A. '15, M.A. '17, Ph.D. '20, business executive, New York City.

THE FACULTY AND STAFF

● Among members of the Board of Trustees, Christian A. Herter has been elected governor of Massachusetts.

Benjamin H. Griswold, III, has been named to the board of directors of the Mathieson Chemical Corporation.

● President Detlev W. Bronk spoke on "Cajal's Influence on Present Concepts Regarding Excitation of Neurons" in the symposium held in honor of S. Ramon y Cajal at the autumn meeting of the National Academy of Sciences held in St. Louis. He also presided at the Academy dinner where the speaker was George E. Mylonas, Ph.D. '29, professor of classical art and archeology at Washington University.

Dr. Bronk is coauthor with the other members of the final report of the Commission on the Financing of Higher Education, "The Nature and Needs of Higher Education."

● In the Faculty of Philosophy, Francis H. Horn, formerly dean of McCoy College, is visiting professor of education during the present academic year.

Kemp Malone, Caroline Donovan Professor of English, recently addressed the annual meeting of the South-Central Modern Language Association, held in Denton, Texas.

Harold E. Vokes, professor of geology, is spending this year working in the Philippine Islands.

Ludwig Edelstein, professor of humanistic studies, will leave this month for Oxford University where he will take up a Fulbright lectureship. Dr. Edelstein expects to return to Hopkins next January.

Neil R. Ayer, Bruce McClure, and Donald B. Oliver, Jr., have been named assistant professors of military science and tactics.

Victor A. Lowe, associate professor of philosophy, will take a leave of absence in February to take up an American Council of Learned Societies faculty study fellowship.

John W. Yolton has been appointed visiting lecturer in philosophy for the next semester.

Leon Madansky, associate professor of physics, is at the Brookhaven National Laboratory on a one-year leave of absence from the University.

Tord Folkeson Palander has been named visiting professor of political economy for the present semester.

Evsey D. Domar, associate professor of political economy, is on leave of absence this academic year to take up a Fulbright lectureship at Oxford University.

John Richard Nicholas Stone has been appointed visiting professor of political economy and Warren Eason lecturer in the department during the next semester.

Damaso Alonso has been named visiting professor of Spanish for the next semester.

● AT THE INSTITUTE FOR COOPERATIVE RESEARCH, William G. Fastie has been promoted to research contract director and Louis Frisco to assistant research contract director.

FABIAN BACHRACH

Eric F. Goldman

Dr. Goldman, M.A. '35, Ph.D. '38 (Hist.), fac. '38–'42, is the author of "Rendezvous With Destiny," published this fall by Alfred A. Knopf. A Princeton professor, Dr. Goldman here makes a detailed estimate of President Truman's administrations and their position in modern American history.

Marshall D. Earle and John S. Thomsen have been promoted to research scientists.

Arthur E. Ruark has resigned to accept the post of Distinguished Professor of Physics at the University of Alabama.

● IN THE SCHOOL OF MEDICINE, Elbert R. Ruth has been named associate professor of anatomy.

Eric Nanson has been appointed assistant professor of surgery.

● IN THE SCHOOL OF HYGIENE AND PUBLIC HEALTH, Russell Andrew Nelson has been named adjunct professor of public health administration.

● IN THE SCHOOL OF ENGINEERING, Robert Maddin has been promoted to associate professor of mechanical engineering.

● AT THE HOSPITAL, John Danielson, assistant to the director, has resigned to become assistant director of Roosevelt Hospital, New York City.

BOOKS

Bernard J. Bamberger, B.A. '22: *Fallen Angels.*

Huntington Cairns, lecturer in criticism, and J. Walker, editors: *Great Paintings From The National Gallery of Art.*

Elliott Coleman, associate professor of English writing: *A Glass Darkly.*

Great Adventures in Medicine; introduction by Detlev W. Bronk, president; contributors include Alan F. Guttmacher, associate professor of obstetrics, Harvey Cushing, fac. '97–'12, Walter Reed, g. '90–'92 (Pathol.), George Richard Minot, fac. '14–'15, and James Franck, fac. '34–'38.

Frank Vigor Morley, B.A. '18, g. '18–'20 (Math.): *Death in Dwelly Lane.*

G. Wilson Shaffer, professor of psychology, and Richard S. Lazarus, assistant professor of psychology: *Fundamental Concepts in Clinical Psychology.*

Charles S. Sydnor, Ph.D. '23 (Hist.): *Gentlemen Freeholders.*

DEATHS

George Hinman Abel, B.A. '08, November 18, 1952.

Joseph Celarek, '21–'22 (Hyg.), November 5, 1952.

Peter Corbin Chambliss, '09–'10 (Arts), October 29, 1952.

Henry Flory Davis, B.E. '23, November 14, 1952.

John M. Jasinski, '23–'24 (Hyg.), November 16, 1952.

Walter I. Kohn, B.A. '01, October 21, 1952.

Charles Fowler Lindsay, Ph.D. '02 (Chem.), April 21, 1951.

John Henry Lurz, '46–'48 (Engr.), November 5, 1952.

Leo J. Nicaise, Jr., '46–'49 (Engr.), January 8, 1952. (Killed in action.)

George Thomas White Patrick, fel. '85–'87, Ph.D. '88 (Philos.), May 21, 1949.

John Jacob Rothermel, P.A.E. '95, g. '95–'98 (Physics), October 24, 1951.

Peter Benjamin Sarason, M.D. '12, July 1, 1952.

Raphael Semmes, Ph.D. '25 (Hist.), November 15, 1952.

ALFRED A. KNOPF

Benjamin P. Thomas

Dr. Thomas, B. A. '24, Ph.D. '29 (Hist.), is author of the new one-volume biography, "Abraham Lincoln," published this fall by Alfred A. Knopf. Mr. Thomas has long been a student of Lincolnia, and has been connected with the Abraham Lincoln Association in its project of preparing "Complete Works."

Edgeworth Smith, B.A. '98, g. '98–'01 (Hist.), October 26, 1952.

Leslie Denis Smith, Ph.D. '13 (Chem.), March 31, 1952.

Geraldo H. de Paula Souza, Ph.D. '20, May 2, 1951.

John L. Stenquist, fac. '27–'30, g. '31–'32 (Educ.), November 8, 1952.

Gladys Dora Trotter, Grad. Nurse '09, April 10, 1952.

Herbert Francis Vanorden, M.D. '10, July 29, 1952.

Edwin Warfield, Jr., g. '09–'11 (Pol. Sci.), November 19, 1952.

Josephine Ridgely Wellmore, '12–'13, '23–'26, '30–'36 (McCoy), November 20, 1952.

William Randall Wilson, B.E. '43, November 1, 1952.

Charles Handfield Wyatt, Jr., '24–'25 (Engr.), October 26, 1952.

THE ALUMNI

Guy E. Snavely, B.A. '01, Ph.D. '06 (French), will retire in June as executive director of the Association of American Colleges.

George H. Whipple, M.D. '05, fac. '10–'14, LL.D (hon.) '47, Nobel Prize winner in medicine, has resigned as dean of the School of Medicine and Dentistry at the University of Rochester. He plans to continue on the staff as professor of pathology.

Taylor Starck, B.A. '11, Ph.D. '14,

THE MONTH
at Johns Hopkins

A calendar of events
December 22—January 31

HOLIDAYS

CHRISTMAS—University classes will recess from Sun., Dec. 21 through Sun., Jan. 4.

REGISTRATION & CLASSES

McCOY COLLEGE—Late afternoon and evening courses for students working toward degrees or for non-degree credits, or simply seeking opportunities to widen their knowledge without working for credits. Registration, Sat., Jan. 31, 10 a.m. to 4 p.m.; Mon., Tues., Wed., Feb. 2–4, 5:30–8:30 p.m.; Room 101, Remsen Hall. Instruction begins Thurs., Feb. 5.

DRAMA

VARIETY AS A FORM OF THEATER—a Drama Evening sponsored by the Johns Hopkins Playshop. Speaker: Richard Hart, poet and critic. Mon., Jan. 19, 8:30 p.m., Levering Hall.

FAVORITE STORIES AND LEGENDS—a presentation by the Children's Educational Theater, featuring dramatizations of stories in children's literature. Sat., Jan. 31, 10:30 a.m. and 3 p.m., the Playshop, Homewood campus. Admission: children, 35 cents; adults, 80 cents.

VARSITY SPORTS

NOTE—No admission fee is charged at any Johns Hopkins home athletic events. Persons who wish to attend Hopkins games during the 1952–1953 University year may obtain a free season ticket by sending a stamped, self-addressed envelope to the Department of Physical Education and Athletics, the Johns Hopkins University, Baltimore 18, Md. Alumni should address their requests to the Alumni Relations Office, the Johns Hopkins University, Baltimore 18, Md.

BASKETBALL—Johns Hopkins vs. Navy, Tues., Jan. 6 (away); Gettysburg, Sat., Jan. 10 (away); Catholic, Wed., Jan. 14 (away); Towson State Teachers, Sat., Jan. 17 (Homewood gym, 8:45 p.m.)

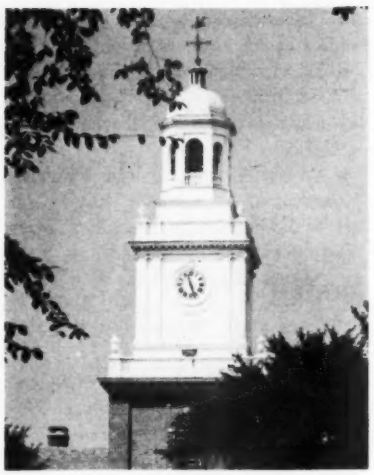
FENCING—Johns Hopkins vs. Navy, Sat., Jan. 17 (away).

WRESTLING—Johns Hopkins vs. Delaware, Sat., Jan. 10 (away); Loyola, Sat., Jan. 17 (away).

MEDICAL MEETINGS

JOHNS HOPKINS MEDICAL SOCIETY—Mon., Jan. 12, 8:15 p.m., Hurd Hall.

CARDIOVASCULAR SEMINAR—Thurs., Jan. 22, 4:30 p.m., Hurd Hall. Speaker: Dr. Lyman Duff, McGill University.



ALUMNI MEETINGS

MODERN LANGUAGES ALUMNI—Sat., Dec. 27, 5–7 p.m., Sheraton-Plaza Hotel, Boston. A Hopkins Hour in conjunction with the meeting of the Modern Languages Association.

HISTORY ALUMNI—Sun., Dec. 28, Washington (place to be announced). A Hopkins Hour in conjunction with meetings of the American Historical Society.

TELEVISION

The Johns Hopkins Science Review is being carried by the following television stations:

* Albuquerque: KOB	* Montreal: CBFT
* Ames: WOI	New York: WABD
Baltimore: WAAM	* Norfolk: WTAR
* Boston: WBZ	* Omaha: WOOW
Chicago: WGN	Philadelphia: WFIL
Cleveland: WXEL	* Pittsburgh: WDTV
* Dallas: WFAA	* Providence: WJAR
* Houston: KPRC	* Salt Lake City: KSL
* Indianapolis: WFBM	* San Francisco: KPIX
* Johnstown: WJAC	Schenectady: WRGB
* Los Angeles: KTTV	* Toronto: CELT
* Louisville: WAVE	Washington: WTTG
* Milwaukee: WTMJ	

* In these cities, consult newspapers or call the stations for day and time of program. In other cities, broadcast time is Mondays, 8:30 p.m., EST.

COMING EVENTS

MEDICAL MEETINGS—The biennial meeting of the Johns Hopkins Medical and Surgical Alumni will be held in February.

ALUMNI BANQUET—The annual dinner of the Johns Hopkins Alumni Association will be held Mon., Feb. 23, 6 p.m., Lord Baltimore Hotel, Baltimore. Reservations may be made through the office of the Director of Alumni Relations, the Johns Hopkins University, Baltimore 18, Md.

COMMEMORATION DAY—Exercises marking the seventy-seventh anniversary of the founding of the Johns Hopkins University will be held on Mon., Feb. 23. University offices and classes will be closed on that date.

Since this issue went to press several weeks ahead of the period covered in this calendar, there may be last-minute changes and additions in the dates and times of events. It is advisable to confirm them by consulting the daily newspapers or by telephoning the Public Relations Office at Johns Hopkins.

(Ger.) professor of German at Harvard University, has been appointed to the Kuno Franck Professorship of German Art and Culture at Harvard.

Luther E. Wear, Ph.D. '13 (Math.), has retired from the California Institute of Technology, where he was associate professor of mathematics.

Edmund M. Spieker, B.A. '16, Ph.D. '21 (Geol.), chairman of the department of geology at Ohio State since 1944, has been appointed a research professor in the department.

W. Stuart Symington, '18–'19 (Arts), this month begins a term as United States Senator from Missouri, as a result of November's election.

Fred G. Carter, M.D. '20, has received the highest honor conferred by the American Hospital Association, the Award of Merit, for his "leadership and vision" in contributing to the "progress of hospitals and hospital care."

Henry E. Niles, B.A. '20, g. '20–'21 (Math.), has been named senior vice president of the Baltimore Life Insurance Company.

A. Adler Sondheimer, M.D. '21, has been appointed gynecologist-in-chief of Sinai Hospital, Baltimore.

Jacob E. Finesinger, B.A. '23, M.A. '25 (Zool.), M.D. '29, professor of psychiatry at the University of Maryland Medical School, is director of the University's new Psychiatric Institute, dedicated in November.

Florence B. Caplan, Grad. Nurse '30, has been named assistant director of nurses and assistant administrator at Sinai Hospital, Baltimore, in charge of Mount Pleasant Sanatorium for tuberculosis.

Rafael Rodriguez-Molina, '31–'32 (Hyg.), has been appointed clinical professor of medicine at the new School of Medicine of the University of Puerto Rico.

Alton A. Smahl, '37–'39 (Hyg.), is on leave of absence from the New York City department of health to serve as public health specialist for Asia and the Middle East for the World Health Organization of the United Nations.

Joseph O. Dean, M.P.H. '37, has been named associate chief for program development in the Bureau of State Services, Public Health Service.

Victor A. Sutter, M.P.H. '37, has been appointed assistant director-general of the Department of Advisory Services of the World Health Organization.

Harley E. Cluxton, Jr., M.D. '41, has been appointed director of the clinics at Northwestern University Medical School.

NEXT MONTH

During the first two years of its existence, *The Johns Hopkins Magazine* devoted its February issue to a special feature. In 1951, on the occasion of the seventy-fifth anniversary of the Johns Hopkins University, a special forty-eight-page issue, composed almost entirely of photographs, was published. In 1952, the February feature was a portfolio of photographs of the Johns Hopkins professors emeriti. Both of these issues are still in demand. The editors hope that next month's issue will have a similar lasting appeal to its readers. It will attempt to interpret, in text and pictures, the significance of the free university in the troubled world of today. Look for the special February, 1953 issue of

THE JOHNS HOPKINS MAGAZINE

"she might have been my kid..."

"There was no time to stop, see? She comes running out from behind this parked car right under my wheels. Her hair is in pigtails, and with the sun shining on it, she might have been *my* kid. We got her to the hospital. It took 3 pints of blood to bring her around. All I have to do is remember the sound of those screaming tires—and I know why *I'm* giving blood."

Yes, all kinds of people give blood—truck drivers, office workers, salesmen. And—for all kinds of reasons. But whatever *your* reason, this you can be sure of: Whether your blood goes to a local hospital, a combat area or for Civil Defense needs—this priceless, painless gift will some day save an American life!

Business Executives!

✓Check These Questions!

If you can answer "yes" to most of them, you—and your company—are doing a needed job for the National Blood Program.

- ☐ Have you given your employees time off to make blood donations?
- ☐ Has your company given any recognition to donors?
- ☐ Do you have a Blood Donor Honor Roll in your company?
- ☐ Have you arranged to have a Bloodmobile make regular visits?
- ☐ Has your management endorsed the local Blood Donor Program?
- ☐ Have you informed your employees of your company's plan of co-operation?
- ☐ Was this information given through Plant Bulletin or House Magazine?
- ☐ Have you conducted a Donor Pledge Campaign in your company?
- ☐ Have you set up a list of volunteers so that efficient plans can be made for scheduling donors?

Remember, as long as a *single* pint of blood may mean the difference between life and death for *any* American . . . the need for blood is *urgent!*

Give Blood Now

CALL YOUR RED CROSS TODAY!

NATIONAL BLOOD PROGRAM